

ELLIPTICAL CORE SUPPORT AND PLUG

ABSTRACT OF THE DISCLOSURE

[0029] A core for a shell die used in casting a turbine bucket includes an elongated body shaped to create internal cooling passages in the bucket, the elongated body formed with at least one core support pin extending transversely of the elongated body and adapted to fix the core inside the shell die, at least one core support pin having an elliptical shape in cross-section. The invention also relates to a cast turbine bucket with at least one exit hole formed therein during casting. The exit hole and a plug for closing the hole are elliptical in cross-section.